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PENTTI VATAJA
KEROKUJA 3 A 6
VANTAA, 01280
FINLAND

EXAMINER

JEAN PIERRE, PEGUY

ART UNIT

PAPER NUMBER

2819

DATE MAILED: 10/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/681,521

Applicant(s)

VATAJA, PENTTI

Examiner

Peguy JeanPierre

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/23/2001.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed on 7/2/2001 has been considered. In addition it is suggested that references listed in page 3 of the specification: Witten (paragraph 0010) and Ziv (paragraph 0011) be provided in response to this office action.

Claim Objections

2. Claims 2-3 are objected to because of the following informalities: In order to clarify the claimed language the following changes are suggested:

Claims 2-3, line 1, after steps (d) and (e) instead of —are as follows—by “ further comprising”. Appropriate correction is required.

Specification

3. The abstract of the disclosure is objected to because it contains more than 150 words. In addition, the abstract should not refer to the purported merits or speculative applications of the invention and should not compare the invention with the prior art. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

4. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. In claim 1, line 5, the term “the number of replaceable...” lacks antecedent basis; line 7, the term “the records” lacks antecedent basis; line 9, the term “the greatest

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number ..." lacks antecedent basis; lines 11-15 (step d) is confusing; it is not clear how and why a pair is not replaceable, a pair is supposed to represent two adjacent symbols; line 11, the term "the first occurrence" lacks antecedent basis; line 14, the term "changing the number " it is not clear what number the claim is referring to; line 25, the term the symbol sequence lacks antecedent basis; line 29, the term "transferring the new symbols into..." lacks antecedent basis; line 31, the term "...greater than any input symbol" is unclear.

Claims 2, line 2 and 3, recites a "step d" and a "step e", this is confusing and improper because this step is previously recited in claim 1;

Further, in claim 2, the term "the changed record's index" lacks antecedent basis; line 14, the term "the other occurrence" lacks antecedent basis;

In claim 3, line 4, the term "the corresponding variable" lacks antecedent basis;

Line 5, the term "the case" lacks antecedent basis; line 10, the term "the number change" lacks antecedent basis; line 11, the term "the disappearing" lacks antecedent basis; line 13, the term "the needed information" lacks antecedent basis, line 14, the term "the last seen..." lacks antecedent basis; line 15, at page 43 the term "the special cases" lacks antecedent basis; line 16, the term "the number ..." lacks antecedent basis; line 17, the term "the decrement ..." lacks antecedent basis; line 23, the term "the new pairs' records" lacks antecedent basis; same line, the term the information" lacks antecedent basis.

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Claim 4, line 10, the term "an atomic..." is confusing it seems to refer to the atomic symbol previously recited in line 1; line 17, the term "the position" lacks antecedent basis.

Claim 5, line (page 44) line 6, the term "the compressed positions" lacks antecedent basis (compressed representation and compressed sequence were previously recited); line 20, the term " the compressed output" lacks antecedent basis.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the formation of the pairs and the criteria for picking a pair are not clearly stated in the claims and specification and well illustrated in the drawings. For instance, Figure 1b, one would assume that the array comprises pairs "x, b", "b, c", "c, b" etc...(these are adjacent symbols); It is not clear when a symbol in a pair is replaceable or not:. The claims are silent in this regard.


8. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the claims are not drafted in a clear and concise manner to enable one skill in the art to comprehend how the data is being compressed and how fast the compression method will be. The relationship between the symbols, the pointers, the new symbol is not clearly stated. It

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is not clear whether the compression method replaces all the identical pairs of symbols by one symbol in this case it will increase memory space and not speed up the compression process; the limitations of "the greatest number of replaceable occurrences descends to a predetermined level" is difficult to comprehend. The claims must be drafted in a clear and concise manner to enable the Examiner to determine Applicant's invention.

9. Because of the complex issues at hand and the examiner inability to comprehend the claims, an art rejection of the claims is precluded.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peguy JeanPierre whose telephone number is (571) 272-1803. The examiner fax phone number is (571) 273-1803.


Peguy JeanPierre
Primary Examiner